



July 26, 2022

Ms. Kellye R. Grinton
 Partner
 Porteous, Hainkel & Johnson, LLP
 301 St. Charles Street
 Baton Rouge, LA 70802
 Office Phone: 225-448-0910
 Facsimile: 225-383-7900
 Email Address: kgrinton@phjlaw.com

Re: Roof Assessment Report
 Village on the Bayou Inc. v. State Farm Fire & Casualty Insurance Co.
 515 Lincoln Road
 Monroe, LA 71203
 Carrier Claim No.: 18-04N7-70F
 Date of Loss: April 13, 2019
 Policy No.: 98-BR-D158-9
 KWA File No.: 07010-22-01

Ms. Grinton:

At your request, David A. Bell, Senior Consultant, KWA Engineering & Building Science Co., Inc. (KWA), visited the referenced property on June 7 and 8, 2022, to review the roof systems and related roof components of the buildings related to a weather event reported as having occurred on April 29, 2019, and to offer opinions regarding estimates furnished for the repair of reported damage.

At the time of coordinating the site visit, interior access was requested in order to evaluate building interiors, reported water leaks, and related damage; however, the request was denied by the insured or insured's representative.

If you have any questions or wish to discuss the contents of this report in further detail, please do not hesitate to contact me at 504-616-7721.

Sincerely,

David A. Bell
 Senior Consultant
 KWA Engineering & Building Science Co., Inc.

DAB/eh
 Attachments

4
2
0
3
N
C
R
1
7
6
5
-
L
U
B
B
O
C
K
T
X
7
9
4
1
6



ENGINEERING & BUILDING
SCIENCE COMPANY, INC.

ROOF ASSESSMENT REPORT

4203 N CR 1765 | LUBBOCK, TEXAS 79416 | 504.616.7721 | KWA-ENGINEERS.COM



VILLAGE ON THE BAYOU INC. v. STATE FARM FIRE & CASUALTY INSURANCE CO.

VILLAGE ON THE BAYOU
515 LINCOLN ROAD
MONROE, LA 71203



PREPARED FOR: MS. KELLYE R. GRINTON, PORTEOUS, HAINKEL & JOHNSON, LLP
DATE: JULY 26, 2022
KWA FILE NO: 07010-22-01
TEXAS REGISTERED ENGINEERING FIRM #F-21802



TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
BACKGROUND/INTRODUCTION.....	1
OBSERVATIONS	3
Residential Buildings	3
Club House and Adjacent Storage Building	3
Parking Structures.....	3
Gazebo	3
REVIEW OF ESTIMATES.....	3
Aguilar Construction Services Estimate	3
Witten Construction Estimate.....	4
State Farm Estimate.....	5
REVIEW OF ORLO FORENSICS REPORT	6
REVIEW OF HISTORICAL METEOROLOGICAL DATA	6
CONCLUSIONS / OPINIONS.....	7
OPINION OF PROBABLE COST.....	13
 EXHIBIT 1 – LOCATION & VICINITY MAP AND SATELLITE IMAGERY	
EXHIBIT 2 – HISTORICAL METEOROLOGICAL DATA – CORELOGIC HAIL VERIFICATION REPORT	
EXHIBIT 3 – HISTORICAL METEOROLOGICAL DATA – CORELOGIC WIND VERIFICATION REPORT	
EXHIBIT 4 – HISTORICAL METEOROLOGICAL DATA – NOAA/NCEI HAIL REPORT	
EXHIBIT 5 – HISTORICAL METEOROLOGICAL DATA – NOAA/NCEI WIND REPORT	
EXHIBIT 6 – ACS ESTIMATE- VILLAGE ON THE BAYOU REVISED 3	
EXHIBIT 7 – AGUILAR CONSTRUCTION ESTIMATE AND PHOTOS	



- EXHIBIT 8 – WITTEN CONSTRUCTION ESTIMATE AND PHOTOS**
- EXHIBIT 9 – VARIOUS STATE FARM ESTIMATES AND PHOTOS**
- EXHIBIT 10 – ORLO FORENSICS REPORT DATED JULY 11, 2020**
- EXHIBIT 11 – AGUILAR NARRATIVE REPORT**
- EXHIBIT 12 – STATE FARM ESTIMATE CHANGE REPORT**
- EXHIBIT 13 – STATE FARM LETTER DATED OCTOBER 30, 2020**
- EXHIBIT 14 – STATE FARM EAGLEVIEW CLAIMSREADY REPORTS**
- EXHIBIT 15 – COLOR PHOTOGRAPHS**
- EXHIBIT 16 – CV OF PATRICK T. SNOWDEN P.E.**
- EXHIBIT 17 – CV OF KEVIN S. AGUILAR**





EXECUTIVE SUMMARY

KWA Engineering & Building Science Co., Inc. (KWA) was retained by Ms. Kellye R. Grinton of Porteous, Hainkel & Johnson, LLP to perform a site visit and evaluation of the roof systems and related components of the various buildings present at Village on the Bayou, 515 Lincoln Road, Monroe, LA 71203, and to offer opinions regarding estimates furnished for the repair of reported damage.

A review of estimates furnished by Aguilar Construction Services on behalf of the Owner revealed, in the opinion of KWA, the inclusion of a significant amount of work and related services which are beyond the necessary scope of work to return the property to pre-loss condition, as further detailed in this Report.

The estimate provided to the insured by Witten Construction (a contractor selected by the insured), while brief in scope, and in need of minor revisions, more accurately reflects the scope of work to repair hail and wind damage believed to have occurred as the result of multiple weather events. The Witten Construction estimate includes 10% overhead and 10% profit, additional costs typically not added to a project involving primarily re-roofing operations.

The State Farm estimate, also brief in scope, and in need of minor revisions to include skylight and wall flashings, also more accurately reflects the scope of work to repair hail and wind damage believed to have occurred as the result of multiple weather events. The State Farm estimate does not appear to include separate line items for overhead and profit.

BACKGROUND/INTRODUCTION

Village on the Bayou is located at 515 Lincoln Road, Monroe, LA 71203.

KWA Engineering & Building Science Co., Inc. (KWA) visited the referenced property on June 7 and 8, 2022, to review the roof systems and related roof components of the buildings related to a weather event reported as having occurred on April 29, 2019, and to offer opinions regarding estimates furnished for the repair of reported damage.

At the time of coordinating the site visit, interior access was requested in order to evaluate building interiors, reported water leaks, and related damage; however, the request was denied by the insured or insured's representative. Due to the lack of interior access, and as relates to the reported weather event, KWA was unable to perform a thorough investigation of building interiors and reported conditions specific to interior damages and interior water leaks.

The property consists of 10 residential buildings, a clubhouse and separate storage building near the swimming pool, a gazebo, and 11 covered parking structures.



The residential units are labeled as follows:

- 101 – 105
- 106 – 109
- 110 – 113
- 114 – 117
- 118 – 121
- 122 – 125
- 126 – 129
- 157 – 161
- 162 – 166
- 167 – 171

A hailstorm was reported as having occurred on April 13, 2019, with damage reportedly occurring to the roof systems and related roof components of the various structures located at 515 Lincoln Road, Monroe, LA 71205.

A Location & Vicinity Map and Satellite image of the property are included as **Exhibit No. 1**. **Exhibit No. 2** is a CoreLogic Hail verification report and **Exhibit No. 3** is a CoreLogic Wind Verification Report. **Exhibit Nos. 4** and **5** are reports for hail and wind, respectively, utilizing data received from the NOAA.

Documents related to this file and furnished to KWA for review are attached as Exhibit Nos. 6 – 17 and are identified below.

<u>Exhibit No.</u>	<u>File Name or Description</u>	<u>No. of Pages</u>
6	ACS Estimate- Village on the Bayou Revised 3	275
7	Aguilar Construction Estimate and Photos	594
8	Witten Construction Estimate and Photos	88
9	Various State Farm Estimates and Photos	136
10	ORLO Forensics Report Dated July 11, 2022	17
11	Aguilar Narrative Report	1
12	State Farm Estimate Change Report	425
13	State Farm Letter Dated October 30, 2020	2
14	State Farm EagleView ClaimsReady Reports	342
15	Color Photographs	1,080
16	CV of Patrick T. Snowden P.E.	8
17	CV of Kevin S. Aguilar	1



OBSERVATIONS

Residential Buildings

The 10 residential buildings contain architectural shingle roof systems with multiple slopes. Typical flashing details and rooftop penetrations exist, including vented and non-vented ridge assemblies, plumbing vents, skylights, and chimneys.

Club House and Adjacent Storage Building

The Club House contains an architectural shingle roof system sloping to the east and west. Typical flashing details and rooftop penetrations exist, including vented and non-vented ridge assemblies, plumbing vents, skylights, and a chimney.

The storage building adjacent to the Club House is similar in design, although no skylights or chimneys were noted.

Parking Structures

The 11 parking structures contain R-Panel or similar metal roof panels in a gable-to-gable configuration, installed over steel framing. Roof decks, such as plywood, do not exist.

Gazebo

The gazebo contains an architectural shingle roof system in a hexagonal configuration. Roof penetrations were not noted, although a rain diverter was present over the entrance to the gazebo.

REVIEW OF ESTIMATES

Aguilar Construction Services Estimate

The Aguilar Construction Services estimate, dated July 11, 2022, and included as **Exhibit No. 6** (ACS Estimate – Village on the Bayou Revised 3), contains 275 pages and totals \$1,637,573.48.

A prior Aguilar estimate, dated October 9, 2020, and included as **Exhibit No. 7** (Aguilar Construction Estimate and Photos), contains 594 pages and totals \$1,271,803.09.

The estimates include, but are not limited to, the re-roofing of the 10 residential structures, the Club House, the storage building, the 11 covered parking structures, and the gazebo, and the wrapping of window frames on Building 101 – 105 and Building 122 – 125. The October 9, 2020 estimate also mentions failed glazing beads and the desire to re-inspect the property as relates to the failed glazing beads. Pricing specific to the failed glazing beads is not provided. The estimates also include interior work.



In addition to the removal and replacement of the shingle roof systems, additional and related items noted in the estimates include:

- The removal and replacement, with new skylights, of 73 skylights on the residential building and the Club House.
- The inclusion of multiple drip edges on each structure.
- The removal and replacement of vinyl J-trim on each structure.
- The removal and replacement of custom bent aluminum on each structure.
- The removal and replacement of custom fascia on each structure.
- The inclusion of caulking on each structure.

Considering **Exhibit No. 6** (ACS Estimate – Village on the Bayou Revised 3), KWA notes the following:

- Costs utilized by Aguilar Construction Services include:
 - \$118.12 for shingle removal (listed as “Remove laminated – comp. shingle rfg. – w/felt”)
 - \$12.22 for high roof removal (listed as “Remove additional charge for high roof (2 stories or greater”)
 - \$44.92 for general labor (listed as “General Labor/Clean-Up”)
- Skylight replacement costs total \$79,698.12.
- Costs related to the replacement of J-trim and related fascia metal, along with caulking, total \$420,739.33.
- Interior work totals \$74,818.82.
- General Conditions total \$182,298.68.
- Line 301 (eave trim at carports) totals \$12,653.48.
- Window wraps for Building 101 – 105 and Building 122 – 125 total \$32,497.74.
- Overhead was calculated at 15% and profit was calculated at 15%, totaling 30% for overhead and profit.

Witten Construction Estimate

The Witten Construction estimate, dated April 14, 2020, and included as **Exhibit No. 8** (Witten Construction Estimate and Photos), contains 88 pages and totals \$387,692.72.

The estimate includes the re-roofing of the 10 residential structures, the Club (Pool) House, the storage building, the 11 covered parking structures, and the gazebo.

The Witten estimate does not include the following:

- Wrapping of window frames.
- Repair of failed glazing beads.
- Interior work.
- The removal and replacement, with new, of skylights on each residential building and the Club House.
- The inclusion of multiple drip edges on each structure.



- The removal and replacement of vinyl J-trim on each structure.
- The removal and replacement of custom bent aluminum on each structure.
- The removal and replacement of custom fascia on each structure.
- The inclusion of caulking on each structure.

Considering **Exhibit No. 8** (Witten Construction Estimate and Photos), KWA notes the following:

- Labor costs, utilized by Witten Construction, include:
 - \$42.58 for shingle removal (listed as "Tear off, haul and dispose of comp. shingles - Laminated")
 - \$4.23 for high roof removal (listed as "Remove additional charge for high roof (2 stories or greater")
- General labor costs are not included by Witten.
- Overhead was calculated at 10% and profit was calculated at 10%, totaling 20% for overhead and profit.

State Farm Estimate

The State Farm estimate, dated November 20, 2020, and included as **Exhibit No. 9** (Various State Farm Estimates and Photos) contains 136 pages and totals \$290,863.51. The estimate lists a January 10, 2020 date of loss, although the cover letter dated April 15, 2021 lists an April 13, 2019 date of loss.

The estimate includes the re-roofing of the 10 residential structures, the Club (Pool) House, the storage building, the 11 covered parking structures, and the gazebo.

The State Farm estimate does not include the following:

- Wrapping of window frames.
- Repair of failed glazing beads.
- Interior work.
- The removal and replacement, with new, of skylights on each residential building and the Club House.
- Flashing of skylights.
- The inclusion of multiple drip edges on each structure.
- The removal and replacement of vinyl J-trim on each structure.
- The removal and replacement of custom bent aluminum on each structure.
- The removal and replacement of custom fascia on each structure.
- The inclusion of caulking on each structure.
- Allowances for additional charges for high roof removal.

Considering **Exhibit No. 9** (Various State Farm Estimates and Photos), KWA notes the following:

- Labor costs, utilized by State Farm, include:



- \$42.35 for shingle removal (listed as “Tear off, haul and dispose of comp. shingles – Laminated”)
- \$27.82 for general labor (listed as “General Laborer”). (Note: Although general labor costs are included in the State farm estimate at the hourly rate of \$27.82, the total general labor cost listed is \$284.88 (10.24 hours).
- General Contractor’s overhead and profit was not included.

REVIEW OF ORLO FORENSICS REPORT

The ORLO Forensics Report, dated July 11, 2022, and included as **Exhibit No. 10** (ORLO Forensics Report Dated July 11, 2022), references “a list documenting interior damage occurrences since the storm event (Exhibit 1)” and indicates the list was provided by representatives of the HOA. A site visit of July 8, 2022 is noted.

ORLO indicates the following in its report:

- Damage to exterior trim consistent with “elevated wind forces”.
- Interior water damage and “bowed and water damaged OSB roof deck (Photo 8)” and “Associated damage to the wall system”.
- The existence of “damage to the roof surface”.
- The existence of an R-Panel on the carports with a rib height of 1-1/4”, rather than 1”, as described in the State Farm estimate dated November 20, 2020, and the need to utilize panels with a rib height of 1-1/4” as “It is likely that the current deck configuration with 1 1/4 in. ribs is required for structural integrity. Replacement with 1 in. ribs is not recommended”.
- The need to remove and replace, with new, various flashings at walls and skylights.
- An allowance for OSB roof deck replacement was not included in the State Farm estimate.

REVIEW OF HISTORICAL METEOROLOGICAL DATA

A review of the CoreLogic Hail Verification Report furnished as **Exhibit No. 2** suggests the occurrence of six hail events within three miles of the subject location since April 23, 2010, with five of these events occurring within one mile of the subject location.

Four events are listed as having occurred at the subject location since and including March 29, 2011. Estimated hail sizes at the subject location range from 0.75-inch diameter (April 14, 2011) to 1.2-inch diameter (March 29, 2011). Hail of an estimated diameter of 0.9-inches is listed as having occurred at the location on April 12, 2019, which is one day before the reported DOL of April 13, 2019. CoreLogic reports a hail event at the subject location on April 9, 2021, after the reported date of loss, with an estimated hail size of 0.8-inch diameter.

A review of the CoreLogic Wind Verification Report furnished as **Exhibit No. 3** suggests numerous wind events over 50 mph since January 1, 2009, with winds over 70 mph estimated on the following dates:



- April 26, 2011 (78 mph)
- August 20, 2018 (72 mph)
- September 9, 2019 (72 mph)
- April 12, 2020 (76 mph)

CoreLogic indicates 20 wind events with estimated windspeeds over 50 mph have occurred at the subject location since the April 13, 2019 date of loss.

Exhibit No. 4 contains NWS Storm Data related to hail occurrences, while NWS Storm Data related to high wind occurrences is provided as **Exhibit No. 5**. These Exhibits support the CoreLogic data.

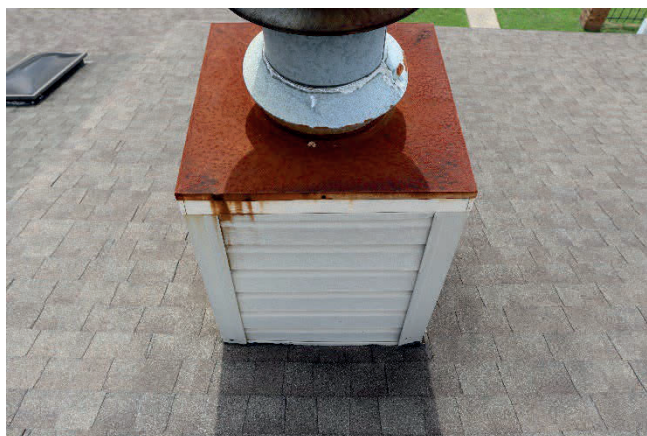
CONCLUSIONS / OPINIONS

Based on our site visits of June 7 and 8, 2022, and a review and our interpretation of information provided to us as of the date of this Report, the opinions of KWA are as follows:

- 1) The shingles of the roof areas of the ten residential buildings, the Club House, the adjacent storage building, the gazebo, and the metal roof panels of the parking structures have been impacted by hail.
- 2) The frequency of hail impacts to the shingle roof areas of the ten residential buildings, the Club House, the adjacent storage building, the gazebo, and the metal roof panels of the parking structures varies by slope and by building.
- 3) Damage resulting from hail impacts to the shingle roof areas of the ten residential buildings, the Club House, the adjacent storage building, the gazebo, and the metal roof panels of the parking structures varies by slope and by building.
- 4) Hail damage to the metal roof panels of the parking structures, which affects the longevity and / or function of the metal panels, was not noted.
- 5) Chimney flue enclosures, sheet metal chimney enclosure cap flashings, and chimney flue caps exhibit minimal hail impacts with the majority of the enclosures, enclosure cap flashings and chimney flue caps not requiring replacement as a result of hail impacts. The enclosure cap flashings are deteriorated and rusted due to age and have not been adversely affected by hail. Conditions noted to the few flue caps dented by potential hail impacts does not affect the performance and/or function of the component.



Photo taken from Page 29 of 35 of Exhibit No. 9



KWA File Photo – June 7, 2022



KWA File Photo – June 7, 2022

- 6) The skylights of the ten residential buildings and the Club House did not appear to have been damaged by hail. Cracks noted to skylight lenses appear to be related to age and deterioration with many cracks existing in the interior, rather than exterior domes of the skylights. Cracks to exterior lenses do exist; however, hail impacts to skylights which result



in fractures to domes are typically concentric in nature. Photographs of skylight conditions are furnished below.



KWA File Photo – June 7, 2022 – View of old sealant around perimeter of dome



KWA File Photo – June 7, 2022 – View of old sealant around perimeter and over cracks in dome

- 7) Hail impacts to the ten residential buildings, the Club House, the adjacent storage building, the gazebo, and the covered parking structures have likely occurred as the result of at least two and likely four or more hail events since and including April 26, 2011, as supported by **Exhibit No. 2** and **Exhibit No. 4**.
- 8) Displacement of shingles and roof-related trim / flashing components has likely occurred as a result of multiple wind events as supported by **Exhibit No. 3** and **Exhibit No. 5**.
- 9) Related to the Aguilar Construction Services estimates:
 - The July 11, 2022 estimate, included as **Exhibit No. 6** (ACS Estimate – Village on the Bayou Revised 3), which totals \$1,637,573.48 is significantly higher than the October



9, 2020 estimate included as **Exhibit No. 7** (Aguilar Construction Estimate and Photos), which totals \$1,271,803.09. The July 11, 2022 estimate is \$365,769.81 higher than the October 9, 2020 estimate.

- Conditions conducive to the wrapping of window frames in the amount of \$32,497.74 were not noted.
- Conditions conducive to the repair / replacement of windows related to failed glazing beads were not noted.
- The replacement of skylights on each building with new skylights, as the result of hail impacts affecting the domes, is not needed as cracks to interior and exterior domes appear to be the result of age and deterioration and do not appear to be the result of hail. KWA does recommend replacement of the skylights should a re-roofing project proceed; however, this recommendation is due to the age and deterioration of the skylights and not due to hail impacts. Aguilar Construction Services provided estimates totaling \$79,698.12 for this work.
- The removal and replacement with new materials of the fascia conditions along the eaves and rakes is not required. The existing fascia metal turns onto the roof surface, beneath the shingles. The existing roof system can be removed without damaging the existing fascia metal and a new drip edge can be installed. Caulking is not required. Photographs of conditions are furnished below. Aguilar Construction Services provided estimates totaling \$420,739.33 for this work.



Photo taken from Page 34 of 35 of Exhibit No. 9

- Costs utilized by Aguilar Construction Services may have been manipulated beyond published Xactimate rates. Examples from the July 11, 2022 estimate, furnished as **Exhibit No. 6** (ACS Estimate – Village on the Bayou Revised 3), include:



- \$118.12 for shingle removal (listed as "Remove laminated – comp. shingle rfg. – w/felt"). The appropriate Xactimate price for this work, based on July 2022 pricing, is \$55.49 per square. Please note that this claim may require pricing in-place as of the date of loss and the corresponding price may be lower than those noted above.
 - \$12.22 for high roof removal (listed as "Remove additional charge for high roof (2 stories or greater)"). The appropriate Xactimate price for this work, based on July 2022 pricing, is \$5.24 per square. Please note that this claim may require pricing in-place as of the date of loss and the corresponding price may be lower than those noted above.
 - \$44.92 for general labor (listed as "General Labor/Clean-Up*"). The appropriate Xactimate price for this work, based on July 2022 pricing, is \$36.43 per square. Please note that this claim may require pricing in-place as of the date of loss and the corresponding price may be lower than those noted above.
 - Considering the differences in pricing noted above, the total approximate cost difference is \$71,149.00 over standard pricing.
- Interior repairs in the amount of \$74,818.82 as noted in **Exhibit No. 6** (ACS Estimate – Village on the Bayou Revised 3) cannot be evaluated. KWA was not allowed access to the interior of the units and, therefore, was unable to evaluate reported interior water leaks and related deficiencies.

In **Exhibit No. 11** (Aguilar Narrative Report), Aguilar Construction Services noted "new post loss interior leaking in to 21 units of VOTB" and places a cost of "\$35k-65k per unit" on repairs. The costs of \$35k-65k per unit do not appear to be included in the July 11, 2022 estimate (**Exhibit No. 6**). The ORLO Forensics Report, dated July 11, 2022, and included as **Exhibit No. 10** (ORLO Forensics Report Dated July 11, 2022), includes a list of reported interior damage resulting from roof leaks. Twenty-one units are identified. KWA requires access to the unit interiors in order to assess the reported interior damages.

- General Conditions in the amount of \$182,298.68 are overstated.
 - The hand loading of materials, in the amount of \$29,676.07, while subject to the discretion of the roofing contractor, is not needed.
 - Commercial Supervision / Project Management, in the amount of \$43,420.00, is not necessary for a project which primarily involves a roofing contractor.
 - The monthly cost of the temporary toilet, while not evaluated as relates to typical Xactimate pricing, appears reasonable.



- Portable generator in the amount of \$7,312.50 and generator temporary power cable in the amount of \$2,925.00 are items which are typically supplied by roofing contractors and typically covered by re-roofing and related costs.
- Dumpster loads in the amount of \$6,317.68 are not needed as roof and related debris is typically covered by the roofing contractor.
- The cost of \$21,394.43 for the hand carrying of debris should be broken out and identified by building.
- The general labor / clean-up cost of \$70,075.20 is excessive and is not required. Daily and final clean-up costs are typically covered by the roofing contractor and form a part of the re-roofing costs. This item is not necessary as a separate line item.
- Eave trim at the carports, in the amount of \$12,653.48, is not required. Eave trim under the metal roof panels does not currently exist.
- Overhead and profit were each calculated at 15%, totaling 30% for overhead and profit, in the amount of \$377,901.44. This is excessive for this project and exceeds the typical overhead and profit rates of 10% and 10%, respectively. Furthermore, as this is primarily a re-roofing project and does not require the services of a general contractor, overhead and profit may not be applicable.

10) Related to the Witten Construction estimate:

- The Witten Construction estimate, dated April 14, 2020, and included as **Exhibit No. 8** (Witten Construction Estimate and Photos), totals \$387,692.72 and includes 10% overhead and 10% profit, totaling \$64,615.72. As this is primarily a re-roofing project and does not require the services of a general contractor, overhead and profit may not be applicable. Removing the overhead and profit reduces the estimate to \$323,077.00.
- The Witten Construction estimate does not specifically include flashings along various walls with channel and related flashings. The addition of these flashings and related work will increase the overall cost of the work.

11) Related to the State Farm estimate:

- The State Farm estimate, dated November 20, 2020, and included as **Exhibit No. 9** (Various State Farm Estimate and Photos), totals \$290,863.51 and does not include overhead and profit, as this is primarily a re-roofing project and does not require the services of a general contractor.



- The State Farm estimate does not specifically include the flashing of the skylights. Addition of skylight flashings will increase the overall cost of the work.
- The State Farm estimate does not specifically include flashings along various walls with channel and related flashings. The addition of these flashings and related work will increase the overall cost of the work.
- The State Farm estimate, when compared to the Aguilar Construction Services estimate, utilized the following prices which are appropriate:
 - \$42.35 for shingle removal (listed as "Tear off, haul and dispose of comp. shingles - Laminated")
 - \$27.82 for general labor (listed as "General Laborer"). (Note: Although general labor costs are included in the State farm estimate at the hourly rate of \$27.82, the total general labor cost listed is \$284.88 (10.24 hours).

12) Related to the ORLO Report:

- ORLO Forensics indicates the existence of "bowed and water damaged OSB roof deck (Photo 8)" and "Associated damage to the wall system"; however, ORLO provides no information as to an investigation of the indicated damages and roof leaks and provides no information as to the source or cause of the reported roof leaks.
- KWA has not evaluated the carport roof structures to determine if panels with 1" high ribs rather than panels with 1-1/4" high ribs would be appropriate; however, if panels with 1-1/4" high ribs exist, similar panels should be installed. Any price difference should be minimal.
- ORLO correctly identifies the need to remove and replace various flashings with new flashings.
- OSB roof deck replacement can be performed on a unit cost basis and determination, if needed, of the cause of the deteriorated or otherwise inadequate deck can be achieved in the field.

OPINION OF PROBABLE COST

KWA requires additional time to provide an opinion of probable cost in the form of a detailed estimate. Ideally, an additional site visit is required to assess reported interior water leaks resulting from the roof system, such that the cause or source of the reported leaks can be identified to determine if these are the result of a particular weather event, or series of weather events, or from age and deterioration.



In considering and reviewing the three estimates outlined in this Report, the opinion of KWA is that the State Farm estimate, once adjusted for skylight and wall flashings, will more accurately reflect the scope and costs necessary to return the property to pre-loss condition.

END OF REPORT

This report is solely for the use of the client and is not for the use of any other third party. This report was not written for the owner of the property at which KWA Engineering & Building Science Co., Inc. performed work. KWA Engineering & Building Science Co., Inc. does not have, and disclaims any contractual relationship with, duty to, or obligation to any party other than the client. This report addresses information acquired as of its date of publication. KWA Engineering & Building Science Co., Inc. reserves the right to modify this report in the event subsequent information or data is provided or developed.